

is not supported by Holtz et al.

It is noted that this "determination" was stated in the previous office action but without reliance on Holtz et al. The determination was traversed and withdrawal thereof was requested in the previous response as being improper since the "determination" tended to trivialize the invention and conform the subject matter of the invention, as construed by the Examiner, to the prior art through impermissible hindsight while not according full and proper consideration to the recitations of the claims. The traverse and request for withdrawal of the "determination" on these grounds is respectfully maintained for the reasons previously made of record. While it may be that the claims are susceptible of a construction broad enough to encompass accommodation of a known type of interface expedient, it does not logically follow that the existence of such an interface expedient (e.g. a hotkey or a field thereof) has any bearing on the novelty or unobviousness of subject matter which accommodates other interface media (e.g. "keysets or menus") with a generalized methodology, particularly for the purpose and in the environment recited in the claims. This irrelevance of the Examiner's "determination" to the claimed subject matter and the deleterious effect upon proper consideration of the claimed subject matter is underscored by the fact that Holtz et al. is not applied against the claims in any ground of rejection since, as the Examiner evidently appreciates, Holtz et al. is not relevant to the issues of novelty or unobviousness of the subject matter actually claimed.

More specifically, it is also respectfully pointed out that while Holtz et al. discloses a field 205 of hotkeys as shown in Figures 2 and 8, as noted by the Examiner, the hotkeys are for selection of particular cameras associated with the system and control appears

to be exerted over the cameras during the hotkey set-up procedure depicted in Figure 8A and discussed at column 17, line 29, to column 18, line 15. The association of a hotkey *in a hotkey field of an operator interface* with particular hardware in the system environment is fundamentally different from allowing "a user to select components *of the operator system interface*, using a pointing device, in order to view information about the selected component on a display device or to effect a change in keysets or menus, thereby *modifying said representation of the operator system interface* within said simulator program" as recited in claim 1 (emphasis added). In any case, it is respectfully submitted that the function of viewing "information about the selected component [of the interface] or to effect a change in *keysets or menus*" is, by its terms, of substantially greater scope than mere definition of hotkeys and is fundamentally different in nature, as well; the quoted language of claim 1 having to do with control of the interface *itself* while this aspect of Holtz et al. is directed to association of a fixed feature of the interface with particular hardware in the system environment. Therefore, it is respectfully submitted that Holtz et al. does not support the Examiner's position in regard to the "determination" stated, particularly to the extent that the "determination" may be considered as potentially inconsistent with or more limiting than the actual claim recitations. Moreover, it is respectfully submitted that, in the context of Holtz et al.. it is even more clear that the Examiner's "determination" is improper, irrelevant and prejudicial since it tends to trivialize the invention and conform the construction of the claimed subject matter to the prior art through impermissible hindsight; preventing proper consideration of the actual recitations of the claims, as previously argued. Therefore, withdrawal of the "determination" is again respectfully requested.

Claims 1 - 10 have been rejected under 35 U.S.C. §103 as being unpatentable over Isreal et al. in view of Klein et al.; the Examiner admitting that Isreal et al. does not teach or suggest an operator system interface simulator program and relying on Klein et al. for such a teaching. This ground of rejection is respectfully traversed since the Examiner's position is not supported by the references relied upon, even through hindsight (which appears evident), and, in any event, the statement of the rejection does not address the actual recitations of the claims and thus fails to provide a *prima facie* demonstration of obviousness of any claim in the application.

Specifically, as claimed, the invention provides for facilitation of programming of an operator interface for a computer system which may be particularly expensive to operate due to, for example, hardware and/or software of the computer system or apparatus with which the computer system is operated, such as aircraft (the operation of which may also complicate the programming of the operator interface due to the concurrent need to operate the apparatus). The invention also provides for the customization of an operator interface in a manner which is completely decoupled from the system it is used to operate and where it may be highly undesirable for a facility for interface modification to be provided.

These functions are accomplished, as previously pointed out, by (1.) providing definitional tables which define governing attributes of the operator interface, for example, from the interface software of the computer system providing the interface, (2.) generating an interface simulator program for simulating the interface and obtaining information about and/or modifying particular components of the interface using a pointing device and a computer system other than the computer system providing the interface,

and (3.) modifying the definitional tables to correspond to changes made in the simulated interface. The modified definitional tables thus obtained are sufficient for modifying the interface when loaded onto the computer system which provides the actual interface.

The Examiner admits that Isreal et al. does not teach or suggest an operator interface simulator program distinct from the operator system interface and relies on Klein et al. to provide such a teaching. However, this feature supports a principal function of the invention and there is no motivation for such a modification provided in Isreal et al. On the contrary, Isreal et al. is directed to the provision of a generic, unprogrammed interface and defining specific hotkeys under user control which may be immediately "run" on the same computer system on which the interface was defined (see column 2, lines 23 - 27, within the passage cited and relied upon by the Examiner) rather than a specific, operable interface for a given computer system which can be simulated on a different and distinct computer system and modified at will as to any or all "governing attributes" to develop modified definitional tables which will provide the same modifications in the interface when run on the original, given computer system and which may not or should not provide for interface modification.

Therefore, the deficiency of Isreal et al. to answer the recitations of the claims extends to not only the provision of simulation, but to the basic concept of "generating a simulator program" for a computer system "distinct from said operator system interface" and having the functions recited, including the provision of information and/or "to effect a *change* in keysets or menus" as well as supporting the function of "modifying said definitional tables..." corresponding to changes in the simulated interface.

While Klein et al. discloses simulation, the simulation is of a very different nature than that of the invention and does not answer the claim recitations as to which Isreal et al is admitted by the Examiner to be deficient. More specifically, Klein et al. is directed to co-simulation of both hardware and software for validating the respective designs of each and appears to be principally concerned which optimization of the co-simulation to avoid, to the extent possible, the discrepancy in execution speed of instruction set simulators and hardware modelers. It is respectfully submitted that such an environment is very different from that of the invention, particularly in regard to the use of an instruction set simulator since, in accordance with the invention, as claimed, the invention includes "generating an operator system interface simulator program" which simulates the "governing attributes" of the interface as defined in tables which may be modified. Thus, the running of the interface simulator program is not, itself, simulated with an instruction set simulator and the tables defining the interface are not "run" but only used to generate a "display of a representation of the operator system interface" as "defined by the definitional tables input in the providing step". Further, while the system of Klein et al. is directed to design validation to ascertain operability of the design, the invention is directed to providing customization of a design already known to be operational. That is, Klein et al. does not teach or suggest providing a display of a representation of an interface defined by definitional tables as an incident of simulation, much less providing for modification of the same for the purpose of programming another system and thus does not answer the recitations of the claims directly or by suggestion or providing motivation for a modification of Isreal et al. in a manner answering the claims.

Moreover, while the design validated in accordance with Klein et al. will presumably will be implemented on a different system distinct from the simulator, when the validated design is implemented, the simulation is effectively "run" on the general purpose simulation computer in order to perform validation whereas the invention provides a representation of an interface which otherwise exists. In this sense, Klein et al. literally provides no teaching or suggestion remotely relevant to the programming of an interface through use of a generated simulator program which is admitted not to be taught or suggested by Isreal et al., much less a simulator program having the recited functions supporting the meritorious effects of the invention.

Further, it is respectfully submitted that Klein et al. taken alone or in combination with Isreal et al. does not provide evidence of a level of ordinary skill in the art which would support the conclusion of obviousness which the Examiner has asserted. Klein et al. does not address the problem of programming an interface using a simulator but only the validation of a design of both hardware and executable software in an environment providing co-simulation of both hardware and software. Thus Klein et al. taken alone or in combination with Isreal et al. does not lead to an expectation of success in doing so by virtue of the claimed subject matter. By the same token, the Examiner's statement of the rejection constitutes a hindsight reconstruction which still fails to answer the recitations of the claims, as pointed out above and a *prima facie* demonstration of obviousness of any claim clearly cannot be made based upon Isreal et al. and Klein et al.

Accordingly, it is respectfully submitted that the sole ground of rejection asserted by the Examiner is clearly erroneous and improper. In essence, it is respectfully submitted that the Examiner has added

Klein et al. to the rejection previously of record evidently in response to the previous remarks concerning simulation and without considering the subject matter actually recited by the claims which support the meritorious effects of the invention and distinguish the invention from the prior art. Therefore, reconsideration and withdrawal of the rejection based on Isreal et al. and Klein et al. is respectfully requested.

Since all rejections, objections and requirements contained in the outstanding official action have been fully answered and shown to be in error and/or inapplicable to the present claims, it is respectfully submitted that reconsideration is now in order under the provisions of 37 C.F.R. §1.111(b) and such reconsideration is respectfully requested. Upon reconsideration, it is also respectfully submitted that this application is in condition for allowance and such action is therefore respectfully requested.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



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